ABSTRACT OF THE DISCLOSURE

In a method of loading several like coupled storage cars with bulk material, in which each storage car comprises a bottom conveyor band to a transfer conveyor band projecting from a front end of the storage car, the bulk material is conveyed at a conveying speed mode by the bottom and transfer conveyor bands arranged successively in the conveying direction, a first storage car is first filled with the bulk material by reducing the conveying speed mode of the a bottom conveyor band in the first storage car to a bulk material storing speed mode while the a transfer conveyor band of the adjacent storage car fills the first storage car, the storing speed mode of the bottom conveyor band in the first storage car being is automatically adjusted in response to a measured amount of the bulk material accumulating in a pile in the first storage car so that the first storage car is filled to a maximal height, and after the accumulated pile of bulk material in the first storage car has reached a forward end position, the conveying speed mode of the bottom conveyor band in the storage car adjacent to, and rearwardly of, the first storage car in the conveying direction is automatically reduced to the storing speed mode.